

Notice of Allowability

Application No.

10/006,645

Examiner

Craig W. Kronenthal

Applicant(s)

KEATING ET AL.

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/28/05.
2. ☒ The allowed claim(s) is/are 1-7,9-16,18-24,26-36,40-59,63,64,66,68 and 70-75.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JOSEPH MANCUSO
SUPERVISORY PATENT EXAMINER

Examiner's Amendment

1. Applicant's amendment filed December 28, 2005, has been entered and made of record.
2. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on January 17, 2006, Jennifer Davis requested an extension of time for 1 MONTH(S) and authorized the Director to charge Deposit Account No. 15-0030 the required fee of \$120.00 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
3. The application has been amended as follows:
 - Cancel claims 37, 38, 39, and 68.
 - In claims 40, 41, 42, and 66 on line 1, please insert - - on a computer readable medium - - after "A computer program."

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

Independent claims 1, 10, 19, 27-33, 40-43, 63, 64, 66, and 70-75 are allowed and therefore claims depending from these claims are allowed.

Independent claims 1, 10, 19, 27-33, 40-42, and 70-74 recite the limitations of: a control processor operable to receive data indicative of said relative importance of said data items to be embedded and to control said encoding processor and said combining processor to encode and embed said data items in accordance with relative importance. The combination of these features as cited in the claims in combination with the other limitations of the claims, are neither disclosed nor suggested by the prior art of record.

Independent claims 43, 63, 64, 66, and 75, recite the limitations of: comparing the source data item of said encoded data item, with at least one other source data item from said data store and estimating said source data of said item erroneous encoded data item in dependence upon a corresponding value of said at least one other recovered data item. The combination of these features as cited in the claims in combination with the other limitations of the claims are neither disclosed nor suggested by the prior art of record.

The closest reference is believed to be Reed et al. (US PN 6,590,996). Reed teaches adding error correction bits to a message, modulating the encoded message, and embedding the message into selected image blocks to create a watermarked image. Furthermore, Reed teaches embedding according to priority of "known bits," which are the error correction bits. However, this priority embedding does not read on the claim language because the relative importance does not differentiate the more important bits from the less important bits of the message. Reed also fails to disclose the detection and recovery process including the step of comparing an unsuccessful data item to a successful data item for estimating the unsuccessful data item.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig W. Kronenthal whose telephone number is (571) 272-7422. The examiner can normally be reached on 8:00 am - 5:00 pm / Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 19, 2006
Craig Kronenthal


JOSEPH MANCUSO
SUPERVISORY PATENT EXAMINER